October 20-22

Welcome to INMARTECH '98!

To help make your stay in La Jolla a pleasant one, the following logistical information is provided:

♦Shuttle Buses **♦**

Shuttle buses will run daily between the Radisson and Empress Hotels and Scripps Institution of Oceanography (SIO) campus. The first morning shuttles will leave the hotels at approximately 07:30 am, with additional trips every 15 to 20 minutes. The shuttles will pick-up passengers outside the hotel lobby doors. The first trip back to the hotels will begin immediately following the end of each day's sessions.

❖INMARTECH '98 Check-In ❖

Participants can check in for INMARTECH '98 at Sumner Auditorium on SIO Campus starting at 07:45 a.m. on Tuesday, 20 October.

❖Ticketed Events❖

The activities in the program agenda denoted by asterisks "*" are ticketed events. Payment for these events must be made prior to the meeting. You will receive your tickets for the pre-paid meals and events at check-in.

♦ Meeting Locations **♦**

The concurrent technical sessions will be held at Sumner Auditorium and Hubbs Hall. The program agenda indicates the session site. Signs will be posted to direct foot traffic between the two rooms and a SIO campus map will be distributed during check-in.

We hope that you enjoy INMARTECH '98!

***INMARTECH '98 AGENDA ***

Tuesday 20, October, 1998

07:30 Start of shuttle service between INMARTECH hotels and SIO campus.

07:45 Check-In at Sumner Auditorium

08:30 WELCOMING SESSION - Sumner Auditorium

- INMARTECH '98 Opening Remarks and Welcome to Scripps Institution of Oceanography Mr. Woody Sutherland, Manager, SIO Shipboard Technical Support
- Overview of Ship Operations and Shipboard Technical Support SIO & UNOLS Dr. Robert Knox, Associate Director, SIO and University-National Oceanographic Laboratory System (UNOLS) Chair
- SIO International Activities Dr. Lisa Shaffer, SIO
- Technician and Instrumentation Support for Seagoing Science by the U.S. National Science Foundation - Dr. Alexander Shor, Program Director, NSF Instrumentation and Technical Services Program

09:45 Coffee Break

10:00 Technical Workshop (Sumner Auditorium)

UNDERWAY SAMPLING SYSTEMS - Mr. Anthony F. Amos (University of Texas), Chair

- An Interactive Shipboard Scientific Log for Research Vessels Mr. Anthony F. Amos, University of Texas Marine Science Institute
- *IMET Improved METeorology Instrumentation* Mr. David Hosom, Woods Hole Oceanographic Institution
- Data Sensor Calibrations and Data Quality Analysis Mr. R. Williams, Scripps Institution of Oceanography
- Underway Data Collection System on Board RV PELAGIA; Considerations and Design of a New System Mr. J. Derksen, Netherlands Institute For Sea Research

12:00 Lunch (SIO Pier) *

13:00 Technical Workshops (Concurrent Sessions)

GEOPHYSICAL TECHNOLOGIES (Hubbs Hall) - Mr. Paul Henkart (Scripps Institution of Oceanography), Chair

- Seismic Sources in the UNOLS Fleet Dr. John Diebold, Lamont-Doherty Earth Observatory of Columbia University
- Sound Receivers Dr. Graham Kent, Scripps Institution of Oceanography
- Chirp Sonar Design for In-Hull Applications Dr. Lester LeBlanc and Dr. Steven Schock, Florida Atlantic Institution
- An Overview of Swath Bathymetry Dr. Dale Chayes, Lamont-Doherty Earth Observatory

ROV AND TOWED VEHICLES (Sumner Auditorium) - Mr. Marc Willis (Oregon State University), Chair

- A Typical Cruise with the ROV Jason Mr. Robert Elder, Woods Hole Oceanographic Institution
- Recent MPL Deep Tow Group Seagoing Work Dr. Fred Spiess, Scripps Institution of Oceanography
- Tiburon: MBARI's ROV for Science Research Dr. William J. Kirkwood, Monterey Bay

Aquarium Research Institute

- A Comparison of Single Body and Two Body Shallow Towed Vehicles- Mr. Mark Rognastad, University of Hawaii
- SeaSoar Metamorphosis Dr. Lindsay Pender, CSIRO Marine Research

17:00 *Shuttle Buses return to Hotels*

18:00 Reception and Poster Session at Birch Aquarium * - Parking (\$3 per vehicle) is available at the Birch Aquarium

Wednesday, October 21, 1998

07:30 Start of shuttle service between INMARTECH hotels and SIO campus.

08:30 Technical Workshops (Concurrent Sessions)

BOTTOM SAMPLING TECHNIQUES (Hubbs Hall)

- A Large Diameter Piston Corer for Use on UNOLS Research Vessels Dr. Peter Kalk, Oregon State University
- MultiCoring Mr. Richard Muller, Moss Landing Marine Laboratory
- Glass Coring and Rock Dredging Mr. Ronald Comer, Scripps Institution of Oceanography

ACOUSTIC, DOPPLER, CURRENT PROFILER (Sumner Auditorium) - Dr. Eric Firing (University of Hawaii), Chair

- Fundamental Components of Shipboard and Lowered ADCP Systems Dr. Eric Firing, University of Hawaii
- Routine Shipboard ADCP Operation: Benefits, Problems, Methods Dr. Eric Firing, University of Hawaii
- Lowered Acoustic Doppler Current Profiler: From an Experimental Instrument to a Standard Hydrographic Tool Dr. Martin Visbeck, Lamont-Doherty Earth Observatory Columbia University, NY
- Acquisition of Vessel-Mounted Narrowband and Broadband ADCP Data using a Sun Logging System on ORV FRANKLIN, FRV SOUTHERN SURVEYOR and RSV AURORA AUSTRALIS - Dr. Helen Beggs, CSIRO Marine Research

12:00 Bus from SIO Campus to SIO Marine Facility (MarFac)

12:30 Bar-B-Que at MarFac *

- Tour of SIO Marine Facility (R/V MELVILLE, FLIP, etc.)
- Underway Sampling System Demonstrations (on R/V MELVILLE) SIO Oceanographic Data Facility and Shipboard Computer Group personnel

 Multibeam Processing Demonstration (on R/V MELVILLE) - Mr. Stuart Smith, Scripps Institution of Oceanography

17:00 Bus back to Hotels

Evening is Open

Thursday, October 22nd

07:30 Start of shuttle service between INMARTECH hotels and SIO campus

08:30 Technical Workshops (Concurrent Sessions)

DECK OPERATIONS AND ONBOARD SAFETY (Hubbs Hall) - Mr. Woody Sutherland (Scripps Institution of Oceanography), Chair

- *Oceanographic Research Vessel Deck Safety* Capt. Daniel S. Schwartz and Mr. George White, University of Washington, School of Oceanography
- Small Research Vessel Deck Operations Mr. Steve Hartz, University of Alaska
- Fiber Optic Cable
- UNOLS Safety Video

SHIPBOARD NETWORKING AND SEANET (Sumner Auditorium) - Mr. Barrie Walden (Woods Hole Oceanographic Institution), Chair

- Data Collection and Distribution Mr. Barrie Walden, Woods Hole Oceanographic Institution
- *SeaNet* Extending the Internet to Oceanographic Research Platforms Mr. Andrew Maffei and Mr. Steve Lerner, Woods Hole Oceanographic Institution
- Sensor Data Acquisition and Display via the Ship Network Mr. Dennis Shields, National Oceanographic and Atmospheric Administration
- *E-mail on the Woods Hole Oceanographic Ships* Mr. James Akens, Woods Hole Oceanographic Institution
- Direct Connection Network Sensor Interfaces Mr. Richard Findley, University of Miami

12:00 Lunch (SIO Campus) *

13:00 Technical Workshop (Sumner Auditorium):

CTD PACKAGES - Mr. Woody Sutherland (Scripps Institution of Oceanography), Chair

- WOCE Operations Mr. Frank Delahoyde, Scripps Institution of Oceanography
- Seabird CTD Data Processing in Coastal Waters Ms. Kristen Sanborn, Scripps Institution of Oceanography
- Data Evaluation and Quality Control for Routine CTD/Hydrographic Data Dr. James Swift,

Scripps Institution of Oceanography

- Marine Instrument Calibration "You Know it Makes Sense" Mr. Paul Ridout, Ocean Scientific International Ltd.
- Insitu Pressure Calibration Mr. Sven Ober, Netherlands Institute For Sea Research

14:30 INMARTECH '98 - WRAP-UP SESSION

Adjourn Shuttle Buses return to Hotels

18:30 Mexican Dinner at SIO Campus *

♦INMARTECH '98 ABSTRACTS

<u>Tuesday 20 October 1998</u> <u>Wednesday 21 October 1998</u> <u>Thursday 22 October 1998</u>

Tuesday 20, October, 1998

Tuesday10:00 Technical Workshop

UNDERWAY SAMPLING SYSTEMS

Sumner Auditorium

Mr. Anthony F. Amos (University of Texas), Chair

❖ An Interactive Shipboard Scientific Log For Research Vessels - Mr. Anthony F. Amos, The University of Texas Marine Science Institute

Daily logs have been kept on sea-going vessels of all types for centuries. In the relatively short history of the purely research vessel, the idea that data of a more scientific nature be logged started in the notebooks of the "naturalists" and now continue in the data banks of shipboard computers. The author has devised a scientific log that incorporates some of the needs of a ship's log with that required by the onboard scientists. A few decades ago, all members of the scientific and technical crew were required to